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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,402	10/26/2001	Jerry J. Karlsberg	BOEI-1-1022	2030

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BLACK LOWE & GRAHAM, PLLC
701 FIFTH AVENUE
SUITE 4800
SEATTLE, WA 98104

EXAMINER

PALADINI, ALBERT WILLIAM

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,402

Applicant(s)

KARLSBERG, JERRY J.

Examiner

Albert W Paladini

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-111 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-111 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/02, 3/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-111 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Lines 8-9 state “the inventive system then iterates the application of rules, to optimize the model.” The specific definition of “optimize” is not provided. There must be some specific criteria for optimizing a model. An iteration operation with respect to the rules, which results in the optimization of the model, is discussed. However, what optimizing the model means is not provided. On the top of page 10, rules which maximize utility and strength of the model while minimizing weight. These are only two parameters of the model, so it is not clear what optimizing the entire model means. For example, if a second optimization process is desired relating drag to the shape of the wing, this process may change the relationship between the strength and weight. Selected sets of parameters may be optimized, but it is not clear what optimizing the entire model means.

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3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1-111 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1

Line 3 recites, “defining a uniform rule set relating to producing a data model of the product.” The phrase “relating does not recite specific function or causal relationship between the “rule set” and the “data model.”

Line 7 recites, “optimizing the first data model.” It is not clear what optimizing a model means. A model generally consists of a plurality of parameters, which characterize a product. These parameters are the result of a process involving controlling parameters. The optimizing a model somehow involves the relationships between input and output parameters. The general statement of optimizing a model is not clear in the light of this.

Claim 38

Lines 3-4 recite, “defining a uniform rule set relating to producing a data model of the product.” The phrase “relating does not recite specific function or causal relationship between the “rule set” and the “data model.”

Line 10 recites, "computer readable medium for optimizing the first data model." It is not clear what optimizing a model means. A model generally consists of a plurality of parameters, which characterize a product. These parameters are the result of a process involving controlling parameters. The optimizing a model somehow involves the relationships between input and output parameters. The general statement of optimizing a model is not clear in the light of this.

Claim 75

Lines 3-4 recites, "means for defining a uniform rule set relating to producing a data model of the product." The phrase "relating does not recite specific function or causal relationship between the "rule set" and the "data model."

Line 9 recites, "means for optimizing the first data model." It is not clear what optimizing a model means. A model generally consists of a plurality of parameters, which characterize a product. These parameters are the result of a process involving controlling parameters. The optimizing a model somehow involves the relationships between input and output parameters. The general statement of optimizing a model is not clear in the light of this.

Appropriate correction and clarification is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-111 are rejected under 35 U.S.C. 102(b) as being anticipated by Hocaoglu (6249714)

This rejection is made to the extent that the claims are understood by considering the recited objectives and the recited elements, which are consistent with the objectives.

In figure 3, Hocaoglu discloses a method for generating an integrated data model of a product where mobile software agent 250 provides a predetermined set of rules to optimize the product, and models depicted in figures 4 A and 4 B are provided to evolutionary intelligent agent 200. A closed loop iteration process continues generating first, second, and more designs until optimization is achieved in accordance with optimization stopping rule 300.

7. Claims 1-111 are rejected under 35 U.S.C. 102(b) as being anticipated by Schroeder (6535795).

This rejection is made to the extent that the claims are understood by considering the recited objectives and the recited elements, which are consistent with the objectives.

In figure 1, Schroeder discloses an optimization system and method, where sets of rules are developed in 12 and inputted into software object 10, which utilizes the

rules to model physical products. The models are inputted into optimizer 22, which uses genetic algorithms to generate a sequence of improved models using optimization rules.

Relevant Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Salimi (5883818) discloses a method and system for generating an improved algorithm for evaluating the operation of an integrated circuit, which includes the step of selecting the modeling functions used in the model from a set of heuristic rules. The set of heuristic rules comprises a library of curve/surface fitting functions for approximating various shaped curves/surfaces. The shape of the error profile is matched with one or more of these fitting functions. For example, if the error profile has a shape of a sine wave, then the sine function is selected from the set of heuristic rules as one of the modeling functions used to generate the model.

Parunak (6536935) discloses a computerized system for market based constraint optimization which includes a method for determining an assignment to a variable through iterative processing which converges from ranges of assignments to a single value, where a first constraint data structure having a first preferential rule set for determining a preferential assignment range of a first variable is created resulting in a first computer module for determining a feasible assignment range of said first variable through an iterative adjustment of said feasible assignment range which satisfies said first preferential rule set such that said feasible assignment range converges towards a single assignment value for said first variable; and a protocol providing communication between said first computer module and said first constraint data structure to repeatedly communicate said feasible and preferential assignment ranges and said iterative adjustments thereof between said first constraint data structure and said first computer module until said feasible and preferential assignment ranges converge at said single assignment value for said first variable.

Brown (6546311) discloses a method and apparatus, which optimizes an injection molding process by removing, selected articles from a plurality of articles produced cyclically and tests a plurality of physical properties of the removed articles including dimensions, weight and gloss, together with a plurality of process parameters. Adjustment of the process is made automatically on the basis of three optimizers, including a case based reasoning optimizer, a fuzzy optimizer and a rule based reasoning optimizer, in order to achieve pre-set article properties. The optimizers have confidence factors associated therewith, determined on the effect of previous process adjustments.

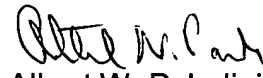
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9. Any inquiry concerning this communication or earlier communication from the examiner should be direct to Albert W. Paladini whose telephone number is (571) 272-3748. The examiner can normally be reached from 7:00 to 3:00 PM on Monday, Tuesday, Thursday, and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Leo P. Picard, can be reached on (571) 272-3749. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

March 18, 2005


Albert W. Paladini
Primary Examiner
Art Unit 2125